

THIS OPINION WAS NOT WRITTEN FOR PUBLICATION

The opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.

Paper No. 11

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte JOHN M. KAISER, WARREN E. MAULE and
DAVID W. VICTOR

Appeal No. 1998-0429
Application No. 08/537,187

ON BRIEF

Before HAIRSTON, JERRY SMITH, and DIXON, **Administrative Patent Judges**.
DIXON, **Administrative Patent Judge**.

DECISION ON APPEAL

This is a decision on appeal from the examiner's final rejection of claims 1-10,
which are all of the claims pending in this application.

We AFFIRM.

BACKGROUND

The appellants' invention relates to an information handling system including
non-disruptive command and data movement between storage and one or more auxiliary

processors. An understanding of the invention can be derived from a reading of exemplary claim 6, which is reproduced below.

6. A method for efficiently moving command and data blocks between storage and one or more auxiliary processors in an information handling system, comprising the steps of:

building a queue of command blocks for execution by an auxiliary function processor;

first writing one or more command blocks to memory;

second writing a start address for each command block to an address FIFO associated with the auxiliary function processor;

reading a command block queue start address by the auxiliary processor; and

processing the commands in the queue by the auxiliary function processor.

The prior art references of record relied upon by the examiner in rejecting the appealed claims are:

Andersen et al. (Andersen)	4,409,656	Oct. 11, 1983
Menendez et al. (Menendez)	5,113,494	May 12, 1992

INTEL 8089 Input/Output Processor, iAPX 86/88,186/188 User's Manual Hardware Reference, Chapter 4, pp 4-1 to 4-6, 4-15, 4-20 to 4-22 and 4-24 (1985) (INTEL)

Claims 1-10 stand rejected under 35 U.S.C. § 103 as being unpatentable over INTEL in view of Andersen or Menendez.

Rather than reiterate the conflicting viewpoints advanced by the examiner and the appellants regarding the above-noted rejections, we make reference to the examiner's answer (Paper No. 8, mailed Aug. 18, 1997) for the examiner's reasoning in support of the rejections, and to the appellants' brief (Paper No. 7, filed Jun. 16, 1997) for the appellants' arguments thereagainst.

OPINION

In reaching our decision in this appeal, we have given careful consideration to the appellants' specification and claims, to the applied prior art references, and to the respective positions articulated by the appellants and the examiner. As a consequence of our review, we make the determinations which follow.

From our review of the examiner's rejection, we find that the examiner has set forth a ***prima facie*** case of obviousness including a motivation for the combination of the prior art teachings. "To reject claims in an application under section 103, an examiner must show an un rebutted ***prima facie*** case of obviousness. **See In re Deuel**, 51 F.3d 1552, 1557, 34 USPQ2d 1210, 1214 (Fed. Cir. 1995). In the absence of a proper ***prima facie*** case of obviousness, an applicant who complies with the other statutory requirements is entitled to a patent. **See In re Oetiker**, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992). On appeal to the Board, an applicant can

overcome a rejection by showing insufficient evidence of ***prima facie*** obviousness or by rebutting the ***prima facie*** case with evidence of secondary indicia of nonobviousness.” **In re Rouffet**, 149 F.3d 1350, 1355, 47 USPQ2d 1453, 1455 (Fed. Cir. 1998). Here, we find that appellants have not overcome the convincing ***prima facie*** case of obviousness by showing insufficient evidence of obviousness or by rebutting the ***prima facie*** case with secondary evidence. Therefore, we will sustain the rejection of claim 6.

As evidence of obviousness, the examiner relies upon the teachings and suggestions of INTEL for teaching the basic structure of auxiliary processors and their associated circuitry. The examiner also relies upon the teaching of INTEL to show the auxiliary processor to assist the CPU in performing many of the input and output functions to free up the CPU. The examiner relies upon the teachings of Andersen and Menendez to teach the use of a FIFO in storing and processing instructions and functions. (See answer at pages 3-4.) We agree with the examiner.

Appellants state that all claims stand or fall together (brief at page 4) and argue the differences between INTEL and “Applicants’ invention.” (See brief at pages 5-7.) Appellants’ arguments essentially focus upon the use of the FIFO and the automatic processing of successive command blocks immediately after completion of the present

command block in a graphics processing environment. While we agree that this distinction concerns the disclosed invention, the language of the claimed invention is what we must evaluate with respect to the rejection. As pointed out by our reviewing court, we must first determine the scope of the claim. "[T]he name of the game is the claim." **In re Hiniker Co.**, 150 F.3d 1362, 1369, 47 USPQ2d 1523, 1529 (Fed. Cir. 1998).

Appellants argue that INTEL only allows one command block to execute at a time. (See brief at page 5.) We agree, but note that the language of claim 6 does not require more than one command block to be processed at a time. The use of the alternative language "one or more" is met by "one." Furthermore, in light of the examiner's line of reasoning using a FIFO for more than one would also meet the alternative language of claim 6. Appellants have not addressed the combination of the teachings in the argument. Therefore, this argument is not persuasive.

Appellants argue that the invention does not require the use of an attention flag because of the automatic processing of the next command block. (See brief at page 5.) We do not find this argument persuasive for the reasons above. Furthermore, appellants do not state the basis in the language of claim 6 upon which this argument is supported.

Appellants argue that the use of the cache memory of the processor increases the efficiency of the Applicants' invention. (See brief at page 5.) We agree, but do not find this limitation to the cache memory in method claim 6. While we agree that INTEL uses the memory of the processor, it was well known at the time of the invention that cache memory was faster and more efficient. Therefore, we do not find this argument persuasive. In our view, the claim language in the independent claims does not include any details of the manner in which the cache memory operates in the process.

Appellants argue that there is no device polling and no bus traffic. (See brief at page 6.) Again, appellants do not identify the language in claim 6 to support the argument. Therefore, we do not find this argument persuasive.

Appellants argue that the use of the FIFO to store the starting address of several command blocks each of which is automatically executed in turn is not taught by Andersen or Menendez. (See brief at page 6.) We are not persuaded by this argument either since we do not find support for it in the language of claim 6. The use of the alternative language allows interpretation of only one command block which is taught by the prior art as discussed above.

Appellants argue the coherent read, non-coherent read and snooping, but once again we do not find any support for these arguments in the language of claim 6. (See

brief at page 6.) Appellants argue that the prior art does not teach these limitations with respect to the dependent claims. We agree with the examiner that determination of the type of reads and snooping of the bus would have been done in the system of the processor and integrated with the auxiliary processor. The language of claims 9 and 10 (along with claims 4 and 5) does not identify how the determinations are made or what data is read. Therefore, we agree with the examiner that the general functionality of a determination of reads and control of snooping would have been obvious to one of ordinary skill in the art.

Appellants argue that the examiner has exercised hindsight reconstruction in rejecting claims 1-10. We disagree with appellants. While the examiner's rejection is brief, it does set forth a ***prima facie*** case of obviousness with respect to the claimed invention and appellants have not shown evidence of nonobviousness nor have they rebutted the ***prima facie*** case with secondary evidence. In our view, appellants are interpreting the language of the claims more narrowly than the actual language of the claims. Therefore, we will sustain the rejection of independent claim 6, and, since appellants group all claims together, we will similarly sustain the rejection of claims 1-5 and 7-10.

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CONCLUSION

To summarize, the decision of the examiner to reject claims 1-10 under 35 U.S.C. § 103 is affirmed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR § 1.136(a).

AFFIRMED

KENNETH W. HAIRSTON
Administrative Patent Judge

JERRY SMITH
Administrative Patent Judge

JOSEPH L. DIXON
Administrative Patent Judge

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